

### **Abstract**

An oversaturation protection circuit is provided within a CMOS image sensor. A detector is arranged to monitor an output column line that is associated with a pixel to determine whether the pixel is oversaturated after being reset. If the pixel is oversaturated after being reset, the level of the pixel is determined by measuring the difference between a first reference voltage and the integrated voltage of the pixel. If the pixel is not oversaturated after being reset, the level of the pixel is determined by measuring the difference between the voltage of the column line shortly after reset and the integrated voltage of the pixel. A detector may be arranged to provide the result of the comparison of the associated pixel to be used with other pixels within the pixel column that are adjacent to the associated pixel.

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